

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

SKAGIT COUNTY DIKE, DRAINAGE
AND IRRIGATION IMPROVEMENT
DISTRICT NO 12,

Plaintiff,

v.

NATIONAL MARINE FISHERIES
SERVICE, DEPARTMENT OF
COMMERCE, GINA RAIMONDO in her
official capacity as Secretary of Commerce;
JANET COIT in her official capacity as the
Assistant Administrator for NOAA
Fisheries,

Defendants.

CASE NO. 2:23-cv-01954-BAT

**ORDER DENYING PLAINTIFFS’
MOTION FOR SUMMARY
JUDGMENT AND GRANTING
DEFENDANTS’ MOTION FOR
SUMMARY JUDGMENT**

This case challenges the National Marine Fisheries Service’s (“NMFS”)¹ biological opinion (“NNS BiOp”)² analyzing the effects of the U.S. Army Corps of Engineers’ (“Army Corps”) proposed action to permit Plaintiff Skagit County Dike, Drainage, and Improvement District No. 12’s (“District 12”) No Name Slough Tidegate (“NNS”) Replacement Project (“NNS Tidegate Project”), under Section 7(a)(2) of the Endangered Species Act (“ESA”).

¹Although the Defendant refers to itself as “Service,” the Court and Plaintiff have consistently referred to Defendant as “NMFS” and the Court does so here again only to avoid confusion.

² The NNS BiOp is contained at AR0051107-0051345.

District 12 seeks summary judgment and declaratory relief on grounds the Defendants violated the Administrative Procedures Act (“APA”) when NMFS issued the NNS BiOp. Dkt. 40-1. NMFS opposes the motion and filed a cross-motion for summary judgment. Dkt. 51-1. The Court has reviewed the parties’ briefing, Administrative Record (“AR”) (Dkts. 34 and 35), and briefs of Amici Curiae Pacific Northwest Waterways Association (“PNWA”)³ (Dkt. 44) and Swinomish Indian Tribal Community (“Swinomish”)⁴ (Dkt. 56).

For the reasons stated herein, the Court denies District 12’s motion for summary judgment and grants NMFS’s motion for summary judgment.

I. SUMMARY OF DISPUTE

In the Skagit River delta, approximately 85% of historic estuary habitat—prime salmonid rearing habitat—has been altered or destroyed by the extensive use of dikes, tide gates, and drainage infrastructure, which has converted thousands of acres to lands in intensive agricultural production. *See* 64 Fed. Reg. 14308, 14318 (Mar. 24, 1999) (identifying estuary and nearshore habitat loss attributable to diking and draining as a significant contributor to Pacific Sound Chinook salmon (“PS Chinook”) decline). The ESA prohibits “take” of endangered species, which encompasses a broad range of activities that harm or attempt to harm members of the species. 16 U.S.C. § 1538(a)(1)(B). “Significant habitat modification or degradation which ...

³ PNWA, a nonprofit trade organization, represents 150+ organizations in Washington, Oregon, and Idaho including ports, tugs, cruise ships and agricultural producers. PNWA advocates for policies and funding to support regional economic development and efficient transport of products through Northwest waterways and ports. Dkt. 44.

⁴ Swinomish is a federally recognized Indian tribe and successor in interest to the 1855 Treaty of Point Elliott. Dkt. 49 at ¶¶ 2, 4. The Swinomish Reservation is located on Fidalgo Island, at the mouth of the Skagit River immediately west of District 12. *Id.* The Swinomish are the People of the Salmon, for whom the PS Chinook are a fundamental cultural lifeway and federally protected property right. *Id.* ¶¶ 3-4, 8.

1 significantly impair[s] essential behavioral patterns, including breeding, spawning, rearing,
2 migration, feeding or sheltering” constitute “harm.” 50 C.F.R. § 222.102; *see also* 64 Fed.Reg.
3 60727, 60728 (Nov. 8, 1999) (maintaining a barrier that impedes access to habitat constitutes
4 take). The take prohibition which typically applies to endangered species has been extended to
5 threatened PS Chinook. *See* 65 Fed. Reg. 42422 (July 10, 2000); 70 Fed. Reg. 37160, 37195
6 (June 28, 2005). Federal agencies must ensure their actions (including permit approval) are not
7 likely to jeopardize a listed species or destroy or adversely modify critical habitat. 16 U.S.C. §
8 1536(a)(2). To “jeopardize the continued existence of” means “to engage in an action that
9 reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both
10 the survival and recovery of a listed species in the wild by reducing the reproduction, numbers,
11 or distribution of that species.” 50 C.F.R. § 402.02. When a jeopardy finding is made, the
12 consulting wildlife service can propose one or more reasonable and prudent alternatives (“RPA”)
13 that avoid the likelihood of jeopardy, can be implemented consistent with the purpose of the
14 action and scope of the agency’s authority and jurisdiction, and are economically and
15 technologically feasible. *Id.*; *see also San Luis & Delta-Mendota Water Auth. v. Jewell* (Jewell),
16 747 F.3d 581, 635-37 (9th Cir. 2014).

17 At issue is NMFS’s conclusion that the enduring effects of the NNS Tidegate Project will
18 further reduce the quality and perpetuate poor conditions of nearshore and estuary habitat for PS
19 Chinook for an additional fifty years and therefore, one or more reasonable and prudent
20 alternatives for habitat mitigation and restoration is necessary to avoid jeopardy and adverse
21 modification. District 12 contends the NNS Tidegate Project is a simple tidegate replacement,
22 which does not expand the footprint of existing structures and provides benefits to fish. District
23 12 argues the NNS BiOp is flawed because it is inconsistent with the 2009 Tidegates and Fish

1 Initiative BiOp (“TFI BiOp”); incorrectly defines the Action Area; double-counts impacts of the
2 tidegate in the environmental baseline and effects of the action; attributes jeopardy in the
3 baseline; and, analyzes the effects of the NNS Tidegate Project as if it were occurring in natural
4 conditions. District 12 also argues NMFS’s jeopardy and adverse modification conclusions are
5 dependent on the assumption that the NNS Tidegate Project will impair the habitat of the
6 juvenile PS Chinook populations.

7 NMFS contends the Project will result in tidegate structures that will exist in the
8 environment for an additional 50 years, the enduring effects of which will significantly impact
9 nearshore and estuarine habitat of the threatened PS Chinook which in turn, restricts the vital and
10 preferred prey source for the endangered Southern Resident killer whales (“SRKW”). After
11 accounting for already low and declining population and habitat quality, NMFS concluded the
12 impacts of the NNS Tidegate Project will likely jeopardize the continued existence of PS
13 Chinook and SRKW and will also likely adversely modify their designated critical habitat. Based
14 on these conclusions, NMFS included an RPA to the Project that requires District 12 to offset the
15 enduring effects of the NNS Tidegate Project.

16 II. FACTUAL BACKGROUND

17 A. Effects of Tidegate Complexes

18 Tidegate complexes, which typically involve extensive shoreline armoring in addition to
19 the tidegate structures, alter hydrology, physical connections between marine and estuarine
20 habitats, sedimentation processes, water quality, and organic matter flow. AR0039357- 60
21 (Giannico and Souder 2005). Hydrological alteration results in increased water temperature,
22 altered dissolved oxygen, and altered concentrations of some chemicals. *Id.* at AR0039358;
23 AR0022345. Tidegates create physical obstructions to historically accessible habitat behind the

gates. *Id.* at AR0039358-59; AR0020398. High flow rates through tidegates also prevent small fish from accessing critical marsh and freshwater habitats. *Id.* at AR0039359. Tidegate complexes modify several functions of estuaries for juvenile salmon, including inhibiting migration; blocking access to important nursery areas; affecting prey production; and blocking the normal patterns of use of the tidal systems. AR0031745-47 (Giannico and Souder 2004); AR0039358-62 (Giannico and Souder 2005).

Since the early 2000s, the Army Corps has concurred with federal wildlife services that tidegate replacement and major repair projects harm ESA-listed Chinook salmon and require mitigation to proceed. For example, in 2002, the Army Corps notified Skagit County Dike District 22 that its tide gate replacement project required biological consultation with NMFS because of the potential for adverse impacts to Chinook salmon. *Swinomish Indian Tribal Cmty. v. Skagit Cty. Dike Dist. No. 22*, 618 F. Supp. 2d 1262, 1264-65 (W.D. Wash. 2008) (“District 22”). NMFS found the tidegate replacement jeopardized Chinook salmon and proposed an RPA for habitat mitigation to offset the adverse impacts. *Id.* at 1265. The Court found the tidegate replacement resulted in “take” of listed Chinook salmon because it impeded fish access to the slough habitat and reduced the extent and quality of habitat downstream by eliminating tidal influence and reducing sediment deposition. *Id.* at 1269-71.⁵

B. Skagit Delta Tidegates and Fish Initiative Implementation Agreement (“TFI Agreement”)

The NNS Tidegate Project initially relied on the TFI Agreement’s programmatic biological opinion (“TFI BiOp”) (AR0000060-AR0000112) for ESA coverage. AR0051113. The

⁵ Judge Jones recognized that “[t]hough the NMFS 2006 Biological Opinion was not formally signed – due to the District’s abandonment of its “after the fact” permit application – the court has been provided no reason to believe its findings and conclusions that a “take” resulted from the Dry Slough tidegate are untrue or inaccurate.” *District 22* at 1271.

TFI, to which District 12 and NMFS were signatories, streamlined permitting for tidegate repairs and replacements in the Skagit and Samish River delta. AR0050739. Dike districts, including District 12, agreed to restore estuary habitat to obtain credits to offset the adverse impacts of tidegate replacement or major repair projects prior to obtaining Corps permits and beginning work, in exchange for the benefit of receiving ESA coverage under programmatic, rather than project-by-project, ESA consultation. AR0050739.

The TFI contemplated that mutually agreed upon habitat credits would accompany each project, AR0050782–83, but did not require habitat credit to implement operational improvement projects, including “[r]eplacement of conventional tidegates . . . with a side hinge gate.” AR0050787. Instead, operational improvements could generate habitat credits. AR0050788. The TFI established an Oversight Committee, which included NMFS, to oversee the generation and debit of habitat credits. AR0050792–93. The Oversight Committee approved several operational improvement projects, including Big Ditch, Higgens Slough, and Joe Leary Slough, without requiring habitat credits. AR0003253; AR0050282; AR0003244.

In November 2019, the TFI BiOp characterized the NNS Tidegate Project as an “operational improvement action” based on its proposed side-hinged gate component, resulting in cancelling out the required habitat credits for 8.6 acres of restoration assigned to the project under the TFI Agreement. AR0050741; AR0050770-771; AR0050785; AR0050744; AR0050880–81 (TFI Oversight Draft Notes for 11-18-19).

In September 2021, the Swinomish sent a Notice of Intent to Sue the Army Corps for violation of the ESA based on the failure to reinstitute consultation with NMFS after two consecutive annual reports showed no new habitat credits; incorrectly allowing major repairs and replacements of tidegates without habitat credits so long as they included an operational

improvement element; and because required habitat restoration had fallen far short of the 2005 Skagit Chinook Recovery Plan's estuary restoration goal. *Id.*

NMFS explains that, in the years following the TFI BiOp, the TFI Oversight Committee began interpreting tidegate projects with elements that improved on past conditions as being operational improvements, even if they would otherwise fall under the definition of a Major Project or Replacement Project requiring habitat credits:

The No Name Slough project was one such project, with this determination made on November 18, 2019. Due in part to such interpretations of the TFI Agreement, progress toward the restoration goals specified in the TFI Agreement and assumed in NMFS' biological opinion was much slower than expected. NMFS began discussions about these concerns with TFI Agreement signatories and the action agency, the [Army Corps] and ultimately, on September 29, 2021, NMFS sent a letter to [Army Corp] recommending reinitiation of the TFI biological opinion. On November 3, 2021, the [Army Corps] requested reinitiation, and the TFI programmatic biological opinion was no longer considered an operable opinion for future projects. The No Name Slough project had not been permitted at that point in time, and so the applicant was advised by [Army Corps] to request individual consultation.

AR0051113.

C. NNS Tidegate

The NNS Tidegate regulates tidal fluctuations and ensures marine waters do not interfere with inland drainage and agricultural activities. Under existing conditions, there are three⁶ top-hinged tidegates and an associated riprapped earthen dike. AR0051116–17.3.⁷ Alongside the NNS Tidegate, several miles of existing shoreline armoring extend along the southeastern shore of Padilla Bay. *See* AR0000539–42; AR0051182. The NNS Tidegate has been located at the mouth of NNS in southeastern Padilla Bay for approximately 140 years. AR0051182. Digitized

⁶ A fourth culvert has already been partially decommissioned. AR0051116.

⁷ Citations to “NOAASkagitAR” are abbreviated to “AR.”

1 1886 maps show the dike was already in place, and the area directly landward of the Tidegate
2 was upland. AR0051182–83; NOAA Supp-0000197-98. Since 1886, agricultural use landward of
3 the Tidegate has remained largely unchanged, AR0002819–23, and the habitat near the Tidegate
4 has been retained, NOAA Supp0000198. The NNS Tidegate directly influences 207 acres of
5 estuarine habitat behind the tidegate (WWAA et al. 2008). AR0051174.

6 Waterward of the Tidegate is Padilla Bay, primarily composed of shallow mudflats.
7 AR0037645, AR0037813. Deeper areas of Padilla Bay feature one of largest contiguous stands
8 of eelgrass along the Pacific Coast of North America. AR0051182, AR0002820–21. Prior to the
9 1930s, water from the North Fork Skagit River flowed into the south end of the Swinomish
10 Channel, which connected the mouth of the river to Padilla Bay during times of high river flow.
11 AR0037796; AR0037646. Since its construction in 1937⁸, a rock jetty has diverted freshwater
12 from the Skagit River away from Swinomish Channel and Padilla Bay, AR0037796, creating
13 both a physical obstruction for the migratory pathway for juvenile and adult salmon to Padilla
14 Bay as well as a physiological barrier due to rapid changes in salinity. AR0001571.

15 D. NNS Tidegate Project

16 The NNS Tidegate Project includes removing and replacing three existing tidegates with
17 a single concrete split box culvert with two 4.0-foot by 5.83-foot side-hinge gates in one
18 location; removing two parallel 4-foot-wide round culverts currently discharging flows from
19 NNS to Padilla Bay; and removing two creosote piles and associated trash. New clean clay,
20 concrete, rock fill, and sheet pile will be added, and the dike will be regraded and strengthened
21 using modern compacting requirements. AR0051115. Total shoreline armoring is proposed to
22

23 _____
⁸ See Dkt. 40 (Corrected Memorandum).
ORDER DENYING PLAINTIFFS' MOTION
FOR SUMMARY JUDGMENT AND
GRANTING DEFENDANTS' MOTION FOR
SUMMARY JUDGMENT - 8

1 include 62 linear feet of large rock, 23 linear feet of vertical concrete structural support for the
2 tide gate, and the addition of 73.6 cubic yards of new rip rap (rocky material to protect from
3 scour and erosion). AR00051115-17; 1 AR000033-39 (photos providing a visual perspective of
4 the work involved in replacing a tidegate). To access the NNS Tidegate, the existing riprap will
5 be removed and replaced with like material within the same footprint. AR0051189; AR0051310.

6 Side-hinged gates are preferable as they provide improved fish passage relative to top-
7 hinge tidegates; however, fish passage remains restricted about 50% of the time as “the length of
8 time that side-hinge gates are open depends on tidal changes (every 6 hours on average).”

9 AR0051201. Removal of two creosote-treated timber piles will begin to reduce contaminant
10 levels within three years of construction. AR0051195-AR0051196 (citing Romberg 2005).

11 E. Consultation History

12 In September 2021, before the Army Corps’ permitting on the NNS Tidegate Project was
13 completed, NMFS recommended that the Army Corps reinstate consultation on the TFI.
14 AR00000017; AR0015131–32. The Army Corps requested District 12 to prepare a biological
15 assessment (“BA”) to facilitate project-specific ESA consultation. AR0015339. In 2022, District
16 12 submitted the BA, which concluded the NNS Tidegate Project was not likely to adversely
17 affect PS Chinook or their critical habitat and would have no effect on SRKW. AR0015361–64.

18 The Army Corps confirmed these determinations and initiated informal consultation with
19 NMFS. AR0015311–12. NMFS declined to concur with the Army Corps’ determinations,
20 triggering formal consultation. AR0015126. In February 2024, District 12 petitioned the Court
21 for a mandatory injunction requiring the NNS BiOp be issued within 15 working days – based on
22 imminent total failure of the NNS Tidegate and need to replace it prior to fall/winter 2024 to
23 protect life and property. Dkt. 7-1 at 3. On March 8, 2024, the Court granted District 12’s

1 mandatory injunction, finding in part the “imminent total failure” of the NNS Tidegate supported
 2 the relief sought by District 12. Dkt. 15 at 15.

3 On April 22, 2024, NMFS issued the NNS BiOp, concluding the NNS Tidegate Project
 4 would jeopardize PS Chinook and SRKW and adversely modify their critical habitat. The NMFS
 5 proposed several “reasonable and prudent alternatives” (“RPA”) to mitigate intensifying harm to
 6 Chinook salmon and orcas, involving nearshore and estuarine habitat restoration that, if
 7 implemented, would avoid jeopardy and adverse modification. AR0051107; AR0051235-51.

8 III. STANDARDS OF REVIEW

9 A. Summary Judgment

10 Summary judgment is proper when “the pleadings, depositions, answers to
 11 interrogatories, and admissions on file, together with the affidavits, if any, show that there is no
 12 genuine issue as to any material fact and that the moving party is entitled to judgment as a matter
 13 of law.” Fed.R.Civ.P. 56(c); *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986). Summary
 14 judgment is a particularly appropriate tool for resolving claims challenging agency action. *See*
 15 *Occidental Eng’g Co. v. INS*, 753 F.2d 766, 770 (9th Cir.1985).

16 B. Agency Decisions Under the ESA

17 Agency decisions under the ESA are reviewed under the APA. *See Bennett v. Spear*, 520
 18 U.S. 154, 174-77 (1997); *Jewell* at 601. The APA requires a court to uphold agency action on
 19 review unless it is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance
 20 with law.” 5 U.S.C. § 706(2)(A). “The scope of review under the ‘arbitrary and capricious’
 21 standard is narrow, and a court is not to substitute its judgment for that of the agency.” *Motor*
 22 *Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

1 An action is arbitrary and capricious where it “relied on factors which Congress has not
 2 intended it to consider, entirely failed to consider an important aspect of the problem, offered an
 3 explanation for its decision that runs counter to the evidence before the agency, or [its decision
 4 is] so implausible that it could not be ascribed to a difference in view or the product of agency
 5 expertise.” *State Farm*, 463 U.S. at 43; *Ctr. for Biological Diversity v. Esper*, 958 F.3d 895, 910
 6 (9th Cir. 2020). The court analyzes “whether the agency considered the relevant factors and
 7 articulated a rational connection between the facts found and the choice made.” *Pac. Coast Fed.*
 8 *of Fishermen's Ass'n v. NMFS*, 265 F.3d 1028, 1034 (9th Cir. 2001) (internal quotations and
 9 citations omitted); *Greater Yellowstone Coal., Inc. v. Servheen*, 665 F.3d 1015, 1023 (9th Cir.
 10 2011). “Where the agency has relied on relevant evidence such that a reasonable mind might
 11 accept as adequate to support a conclusion, its decision is supported by substantial evidence.”
 12 *Jewell*, 747 F.3d at 601 (simplified). “Even if the evidence is susceptible of more than one
 13 rational interpretation, the court must uphold the agency's findings.” *Id.*

14 “Judicial review pursuant to the [APA] is based solely on the administrative record[.]”
 15 *Ctr. for Biological Diversity v. U.S. EPA*, 90 F. Supp. 3d 1177, 1197 (W.D. Wash. 2015); *State*
 16 *Farm*, 463 U.S. at 50 (“agency’s action must be upheld, if at all, on the basis articulated by the
 17 agency itself,” not based on a “post hoc rationalization”).

18 IV. MOTION TO STRIKE

19 District 12 moves to strike portions of Defendants’ Reply (Dkt. 59) pursuant to LCr
 20 7(g)(2) as improperly presenting new argument and evidence, pre-decisional materials not in the
 21 AR and factual assertions without citation to the AR. Dkt. 61.

22 Only admissible evidence may be considered in ruling on a motion for summary
 23 judgment. *Orr v. Bank of America, NT & SA*, 285 F.3d 764, 773 (9th Cir. 2002); *see also* Fed. R.

1 Civ. P. 56(e). A party may object to cited documentation asserting the material would not be
2 admissible in evidence. Fed. R. Civ. P. 56(c)(2). Admissible declarations or affidavits must be
3 based on personal knowledge, must set forth facts that would be admissible in evidence, and
4 must show the declarant or affiant is competent to testify on the matters stated. Fed. R. Civ. P.
5 56(c)(4). Objections to evidence because the evidence is irrelevant, speculative, argumentative,
6 vague and ambiguous, or constitutes an improper legal conclusion, is duplicative of the summary
7 judgment standard itself. *See Burch v. Regents of University of California*, 433 F.Supp.2d 1110,
8 1119–20 (E.D. Cal. 2006). Thus, to the extent defendants have submitted improper argument,
9 uncited evidence, post hoc rationalizations, or other evidence outside the AR, it will not be
10 considered by the Court in ruling on the cross-motions for summary judgment. Therefore, the
11 Court denies the motion to strike as moot.

12 V. DISCUSSION

13 A. Effect of TFI BiOp

14 District 12 contends it is arbitrary and capricious for NMFS to reverse its position from
15 five years ago that the NNS Tidegate Project provided a conservation benefit to ESA-listed
16 species. Dkt. 30 at 14-15. The 2019 TFI Oversight Committee concluded the NNS Tidegate
17 Project was an “operational improvement” eligible for ESA coverage under the TFI BiOp
18 without need of mitigation or use of credit. *Id.* citing AR0003238; AR0050883; AR0003253. At
19 that time, NMFS concluded the effects of providing programmatic coverage for repair and
20 replacement of tidegates in the Skagit delta “was not likely to jeopardize the continued existence
21 of Puget Sound Chinook Salmon.” District 12 argues NMFS failed to identify changes in the
22 condition of the species or their habitat between 2019 and 2024 to justify its reversed opinion.

1 The NMFS explains the 2019 BiOp was a programmatic approach to analyzing aggregate
 2 effects of a broad suite of actions; there was never an individual ESA determination on the NNS
 3 Tidegate Project; the Army Corps had not issued a permit; and in 2021, the Army Corps
 4 withdrew programmatic ESA coverage and reinitiated consultation with NMFS because major
 5 repair and replacement projects had been incorrectly interpreted as not requiring any habitat
 6 credits so long as they included an operational improvement.⁹ The NNS Tidegate was one of the
 7 replacement projects which had been incorrectly interpreted. *See* II.B above.

8 Because the NNS Tidegate Project involves 73.6 cubic yards of new rock armoring and
 9 excavation of the dike/levee to accomplish the replacement, NMFS contends it qualifies as a
 10 “replacement” project under the TFI Agreement, and therefore, under the terms of the TFI
 11 Agreement, and the TFI BiOp which analyzed it, the NNS Tidegate Project requires 100% of
 12 habitat restoration credits to be in hand prior to permit issuance. However, because it
 13 characterized the NNS Tidegate Project as an “operational improvement action” based solely on
 14 the “side-hinge gates,” the TFI Oversight Committee ignored TFI’s framework for classifying
 15 projects as minor, major, or replacement which, in turn, ignored the overall life-extending
 16 purpose of the “replacement” project with its enduring adverse effects.

17 NMFS notes it has consistently taken this position and as an example, points to its
 18 jeopardy and adverse modification findings on the proposed replacement of the Dry Slough
 19 tidegate on the Skagit River. AR0000002. *See, District No. 22* at 1270 (describing NMFS’s
 20

21 ⁹ This concern is stated in NMFS’ reinitiation letter: “As you may be aware, issues related to the
 22 interpretation and application of elements of the TFI implementing agreement have arisen over
 23 time, which NMFS is concerned may result in effects to the listed species and their habitat in a
 manner or to an extent not previously considered.” Specifically, as projects were increasingly
 interpreted as OIPs, the restoration credits associated with those tidegate complexes and
 anticipated by the TFI Agreement and its biological opinion were not materializing. AR0051326.

analysis of tidegate impacts on listed species and habitat to include the long-term effects of the Dry Slough structures). The Dry Slough BiOp required mitigation to offset adverse habitat impacts in nearshore and estuary habitats. AR0000002-04;¹⁰ *District No. 22* at 1265. NMFS also points to other projects where it required mitigation to offset future effects of the proposed repairs or replacements. *See e.g.*, AR0003128-31; AR0026635. The biops in these programmatic opinions reflects that conservation credits/deficits were determined as to each project within the program. *See e.g.*, AR0026635-AR0026636 (four proposed projects had sufficient conservation offsets and were not subject to the RPA; eleven had debits requiring the RPA.)¹¹

NMFS has provided a rational and reasonable explanation for why the NNS Tidegate Project, although originally identified solely as an “operational improvement”, is now also properly identified as a replacement project requiring mitigation. The NNS Biop is consistent with the purpose of the TFI Agreement and TFI BiOp in that it focuses on the likely enduring effects of the tidegate’s extended useful life on estuarine and nearshore habitat. *See* 50 C.F.R. § 402.02. (“Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action.”).

B. The “Action Area”

To formulate its biological opinion, NMFS must determine the geographic scope of the “action area.” The “action area” includes “all areas to be affected directly or indirectly by the Federal action and *not merely the immediate area involved in the action.*” 50 C.F.R. § 402.02

¹⁰ District 12 correctly notes that the Dry Slough BiOp is not part of the AR. This cite is to statements made by Kim Kratz on April 19, 2024, setting out the information considered by NMFS in preparing the NNS BiOp.

¹¹ In the case of the Salish Sea Nearshore programmatic opinion, the proposed action included habitat mitigation which allowed the NMFS to reach a no jeopardy/no adverse modification conclusion (similar to its approach in the 2009 TFI BiOp). AR0000113; 0000337-38.

(emphasis added); *Environmental Protection Information Center v. Ban Atta*, 692 F.Supp.3d 879, 896-97 (decision to exclude designated critical habitat locations in the action area was arbitrary and capricious). “Indirect effects are those that are caused by the proposed action and are later in time but are still reasonably certain to occur.” 50 C.F.R. § 402.02. Thus, the Action Area consists of all areas where the environmental effects (physical, chemical, and biotic) of the proposed NNS Tidegate Project are expected to occur, and which are reasonably expected to occur in the future. 50 C.F.R. § 402.02; 84 Fed. Reg. 44,988-89 (Aug. 27, 2019). [NMFS] must explain the “scientific methodology, relevant facts, or rational connections linking the project’s potential impacts” to the action area boundaries to enable a reviewing court to determine whether the action area was properly conceived. *Id.*

District 12 argues NMFS improperly delineated the Action Area based on the migratory ranges of the PS Chinook and SRKW instead of focusing on the effects of the NNS Tidegate Project within the specific geographic area. Dkt. 40-1 at 15-17; Dkt. 44 at 7. District 12 cites to several cases rejecting challenges to expand action areas based on the migratory range of a species. Dkt. 52 at 12 (citing *Oceana Inc. v. Evans*, 384 F. Supp. 2d 203, 229, *order clarified*, 389 F. Supp. 2d 4 (D.D.C. 2005) (rejecting inclusion of areas where loggerheads are affected by any source of mortality); *Sierra Club v. U.S. Dep’t of Interior*, 990 F.3d 909, 916 (5th Cir. 2021) (rejecting inclusion of adjacent project when jeopardizing activity would occur largely to the south of both projects); *Ocean Conservancy v. Gutierrez*, 394 F. Supp. 2d 147, 161 n.18 (D.D.C. 2005) (rejecting inclusion of the “full migratory range of sea turtles”).

The full migratory ranges of PS Chinook and SRKW are much larger than the delineated Action Area. AR0015508, AR0051163, AR0051169. As required by 50 C.F.R. § 402.02, NMFS included the indirect biological effects of the NNS Project on SRKW (*i.e.*, reduced prey base) in

1 the specific geographic area where those effects are anticipated to occur. The best available
2 science demonstrates Skagit River PS Chinook migrate out into Padilla Bay, among other
3 pathways, and then travel and are prey for SRKW throughout the Puget Sound. AR0051174.
4 Thus, the potential for the NNS Tidegate Project to further reduce PS Chinook as SRKW prey
5 defined the outer marineward edge of the action area – the zone of effect where greater numbers
6 of PS Chinook would have been available as SRKW prey but for the Project. AR0051174; 50
7 C.F.R. § 402.02; *see also*, *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 902 (9th Cir.
8 2002) (action area impermissibly narrow in failing to include areas where grizzly bears impacted
9 by the proposed action move in search of food).

10 District 12 argues NMFS’s conclusions are incorrect because the PS Chinook, the only
11 population of listed species in the NNS Tidegate Project area, is “relatively healthy,” increasing
12 in abundance over the short and long-term periods and progressing toward recovery (*see*
13 AR0051210) and, because the NNS Tidegate is a *replacement* and not new construction in an
14 undeveloped environment, NMFS should have analyzed incremental changes to habitat (and
15 species) within the immediate area affected by the project activities.

16 However, as noted by the NMFS, “[d]espite the relative healthy abundance and diversity
17 of the Skagit Basin Chinook populations in the ESU, they are at “less than 20 percent of their
18 overall recovery goal and have experienced 15-year declining trends in abundance (Ford 2022).”
19 NMFS recognized that some of the immediate effects of the tidegate replacement, such as
20 construction noise, flow modifications, and water quality impacts do not extend beyond the
21 immediate vicinity of the Project. *See, e.g.*, AR0051192 (water quality impacts are “localized”);
22 AR0051193 (area in which benthic forage base is “temporarily diminished” is “very small”);
23 AR0051195 (PAHs expected within “a short distance of creosote pile removal”). However,

1 NMFS also properly notes that the NNS Tidegate Project is not merely a replacement of what is
 2 there today but will prolong the life of the tidegate complex, thereby preventing the recovery of
 3 habitat for a length of time commensurate with the new life of the structure.

4 District 12 also points out that the TFI BiOp Action Area did not mention the SRKW.
 5 AR0000070–71. NMFS explains its reasoning today is based on recent scientific advancements
 6 in understanding just how crucial the Chinook prey base is to SRKW recovery. Although
 7 scientific data predating the TFI BiOp recognized that PS Chinook are the preferred prey of the
 8 SRKW,¹² more recent studies have determined more dramatic declines in SRKW survival and
 9 reproduction linked to the Chinook prey base. *See, e.g.*, AR0051174 (2021 study concluding 67
 10 percent of Chinook salmon found in SRKW diet samples estimated to have originated from
 11 Puget Sound); AR0024914-28 (2023 study evaluating relationship between Chinook salmon
 12 abundance and demographic rates of SRKWs)¹³; AR0017275-83 (2024 study predicting prey-
 13 mediated changes in SRKW survival and reproduction likely to lead to even more dramatic
 14 declines than prior baseline models suggested).

15 Cases relied on by District 12 and amicus PNWA do not undermine NMFS’s approach.
 16 In *Nat’l Wildlife Fed’n v. NMFS*, 254 F. Supp. 2d 1196, 1210 (D. Or. 2003), the Court rejected

17 ¹²See AR0025783–84 (“Current data suggest that Chinook salmon, the region’s largest salmonid,
 18 are the most commonly targeted prey of resident killer whales in Washington and British
 19 Columbia between late spring and early fall (Ford *et al.* 1998, Hanson *et al.* 2005, Ford and Ellis
 2006”).

20 ¹³ See also AR 24914-28 (Nelson, Ward Linden, Ashe, William 23 June 2023) (previous studies
 21 correlated SRKW demographic rates with indices of Chinook salmon, but these approaches
 22 modeled reproduction and survival independently. Using an IPM for SRKWs that models both
 23 processes simultaneously, this study evaluated the relationship between Chinook salmon
 abundance and demographic rates of SRKWs, with the goal of updating understanding of a
 potential causal relationship between prey availability and SRKW population dynamics, and how
 these relationships may have changed over time. Results suggest that SRKW mortality rates are
 more strongly associated with Chinook salmon abundance than birth rates.

1 an action area limited to the immediate area (where the effect on the 12 salmon ESUs is most
2 direct) as contrary to the mandate of ESA’s implementing regulations to include the range-wide
3 area, where the impact is perhaps less direct but no less certain to occur. In *San Francisco*
4 *Baykeeper v. United States Army Corps of Engineers*, 219 F. Supp.2d 1001 (N.D.Cal. 2002), the
5 Court upheld limiting the scope of the action area affected by dredging and berth projects to only
6 two species found near the project area. *Id.* at 1021. The plaintiffs’ proposal to extend the action
7 area based on an indirect effect to invasive species was rejected because the proposed
8 methodology would “require a degree of speculation not contemplated by § 7 of the ESA, which
9 focuses on actions that are “likely to jeopardize” the continued existence of listed species.” *Id.*
10 (citing 16 U.S.C. § 1536(a)(2); *see* 40 C.F.R. § 402.14(h)(3). Conversely, NMFS relies here on
11 current science of the indirect effect on the SRKW prey base of PS Chinook abundance.
12 AR0024914-28; AR0017275-83; AR0023731; AR0051160-61.

13 “Where the agency has relied on relevant evidence such that a reasonable mind might
14 accept as adequate to support a conclusion, its decision is supported by substantial evidence.”
15 *Jewell*, 747 F.3d at 601 (simplified). NMFS has articulated a reasonable and lawful reason based
16 on science methodology, relevant facts, and rational connections for its conclusion that the
17 marineward side of the Action Area should extend to the entirety of the Puget Sound.

18 C. Environmental Baseline

19 The “environmental baseline” “refers to the condition of the listed species or its
20 designated critical habitat in the action area, without the consequences to the listed species or
21 designated critical habitat caused by the proposed action.” 50 C.F.R. § 402.02. The purpose of
22 the baseline is to “provide a snapshot of the health of the species within the action area without
23

1 considering the effects of the proposed action.” USFWS & NMFS, *Consultation Handbook*, 4–
 2 22 (1998).¹⁴

3 The environmental baseline includes consequences to listed species or designated critical
 4 habitat from existing agency facilities that are not within the agency’s discretion to modify. 50
 5 C.F.R. § 402.02. If an agency has discretion to issue regulatory permits concerning an existing
 6 structure, the agency must analyze whether the permit extends the life of the existing structure. If
 7 the permit extends the useful life, the resulting effects of the extension are not part of the
 8 environmental baseline but are categorized and analyzed as effects of the proposed action. *See*
 9 AR0002764-70 (2020 Interagency Memo Between Army Corps and NMFS).

10 District 12 contends NMFS miscalculated the environmental baseline by excluding the
 11 NNS Tidegate because it “has no remaining useful life,” and NMFS’s justification for omitting it
 12 from the baseline is based on the erroneous assumption that impacts of the NNS Tidegate “would
 13 not occur in the absence” of the new USACE permit. Dkt. 40-1 at 20 (citing AR0051186).
 14 District 12 claims this is a 180-degree reversal of TFI BiOp, which explained that “the effects of
 15 the proposed action assumes that regardless of the proposed action, the existing tidegate
 16 infrastructure will remain in place.” *Id.* (citing AR0000089).

17
 18
 19 ¹⁴ Under the regulations in effect when the NNS BiOp was issued, the baseline was defined as
 20 “the past and present impacts of all Federal, State, or private actions and other human activities
 21 in the action area” 50 C.F.R. § 402.02. When adopting this definition, NMFS explained it
 22 “revised the definition of environmental baseline to make it clear that “environmental baseline”
 23 is a separate consideration from the effects of the action. In practice, the environmental baseline
 should be used to compare the condition of the species and the designated critical habitat in the
 action area with and without the effects of the proposed action.” *Endangered and Threatened
 Wildlife and Plants; Regulations for Interagency Cooperation*, 84 Fed. Reg. 44976, 44978 (Aug.
 27, 2019).

1 NMFS determined the NNS Tidegate had no remaining useful life and based on
2 comments from District 12, that the dike/riprap to be replaced had 10 years of useful life
3 remaining. AR0051187. NMFS incorporated this 10-year useful life into the environmental
4 baseline. AR0051175-89. NMFS determined the Army Corps' permit would significantly extend
5 the life of what District 12 characterizes as a "failing" tide gate. The TFI Agreement
6 acknowledges that projects as extensive as the NNS Tidegate Project (*i.e.*, involving replacement
7 of tidegates, excavation of the tidegate and surrounding dikes), extend the life of the structures.
8 *See* AR0050769; AR0050771. The NNS Tidegate Project requires removal and replacement of
9 the entire tidegate structure, thereby perpetuating the resulting degraded habitat conditions for
10 another 50 years. AR0051315; AR0051189. This means that, without the extensive work
11 included in the NNS Tidegate Project, the tidegate and armoring would degrade and ultimately
12 fail. AR0051187-88. The NNS BiOp notes the degradation and failure could result in some
13 negative impacts such as creosote piles subsiding into the water, but would mostly result in
14 positive impacts, such as enabling estuary habitat-forming processes to occur and allowing
15 unimpeded fish access. *Id.*

16 Based on this analysis, NMFS appropriately excluded the future effects of the rebuilt
17 NNS Tidegate from the environmental baseline, reasonably finding that future effects should be
18 considered as effects of the NNS Tidegate Project. The Court finds the NMFS's environmental
19 baseline analysis is lawful, reasonable, and supported by the record.

20 D. Enduring Effects Analysis

21 District 12 agrees the BiOp's description of the environmental baseline included
22 developed conditions, which NMFS attributed to the existing NNS Tidegate. Dkt. 52 at 13.
23 However, the problem, according to District 12, "is that the [NNS] BiOp did not evaluate the

1 *effects* of the NNS Tidegate Project in the context of these actual and current baseline
 2 environmental conditions.” Dkt. 52 at 16.

3 The “effects of the action” “are all consequences to listed species or critical habitat that
 4 are caused by the proposed action, including the consequences of other activities that are caused
 5 by the proposed action.” 50 C.F.R. § 402.02. “A consequence is caused by the proposed action if
 6 [1] it would not occur but for the proposed action and [2] it is reasonably certain to occur.” 50
 7 C.F.R. § 402.02. Effects of the action may occur later in time and may include consequences
 8 occurring outside the immediate area involved in the action. 50 C.F.R. § 402.17; AR0002764.

9 District 12 argues NMFS conducted the effects analysis as if the NNS Tidegate would be
 10 removed “but for” the Army Corps’ permit, and improperly double-counted effects by
 11 comparing the NNS Tidegate enduring effects against a reference scenario of what undeveloped
 12 habitat could be without the presence of the tidegate – a tidegate that “exists in the environment
 13 today, and has for more than 140 years, and thus its effects are known.” However, District 12 has
 14 also asserted that the NNS Tidegate is near collapse and that saltwater inundation would occur in
 15 the absence of the NNS Tidegate Project.

16 NMFS considered that the newly replaced, fully functional tidegate complex will cause
 17 enduring effects for an additional 50 years and will thus further deteriorate the baseline
 18 conditions of the already-deficient habitat for both species.¹⁵ The current status of critical habitat
 19 for both species is poor and does not support the species’ conservation. AR0051130-37;

21 ¹⁵ The existing abundance and productivity numbers for both species are already low and habitat
 22 quality for both species is poor and unable to support the current biological needs, let alone
 23 contribute to the recovery of either species. AR0051229-31. Both species have been ESA listed
 for decades with no real or meaningful progress toward reversing their imperiled status.
 AR0051130-37; AR0051156-59.

1 AR0051156-59. NMFS considered localized effects of the proposed action on critical habitat
2 through qualitative analysis, supplemented by the peer-reviewed Puget Sound calculator.
3 AR0051338-45; AR0003262; AR0051196-98; AR0051203-05; AR0051213-19. NMFS
4 determined that even these localized adverse effects, over the next 50 years, are consequential at
5 the designation scale given the current status of the critical habitat, which has only a small
6 amount of habitat remaining in good condition. AR0051231-35. NMFS concluded that, when the
7 enduring effects of the NNS Tidegate Project over the next 50 years are added to the current poor
8 status of critical habitat, the NNS Tidegate Project is likely to adversely modify PS Chinook and
9 SRKW designated critical habitat.

10 For these reasons, NMFS determined that the NNS Project, with its effects locked in for
11 an additional five decades without any meaningful habitat mitigation. will only perpetuate the
12 degraded habitat function of the nearshore and estuarine habitat and preclude the development of
13 more functional habitat conditions over the next 50 years – *i.e.*, likely adverse modification. *See*
14 84 Fed. Reg. at 44985 (adverse modification results where an alteration caused by the proposed
15 action delays the development of physical or biological features in degraded habitat.). Thus,
16 NMFS reasonably concluded the NNS Project without any offsetting habitat mitigation would
17 likely result in jeopardy by appreciably reducing the likelihood of both the survival and recovery
18 (as evidenced by decades of no meaningful change in their status) of PS Chinook and SRKWs in
19 the wild by reducing their numbers and productivity. 50 C.F.R. § 402.02; AR0051224-35.¹⁶

21 ¹⁶ PNWA argues NMFS failed to account for improved passage and reduced sediment
22 production. Dkt. 44 at 9. However, NMFS considered the passage effects of the proposed side
23 hinged gate and still found adverse effects. AR0051201. NMFS also discussed sediment
production and routing and found them to be generally negative through increased sediment
temperature, more coarse sediment, etc., all of which results in less favorable habitat quality and
quantity for salmonids. AR0051196-204.

1 The NNS BiOp does refer to habitat quality without the presence of the NNS Tidegate.
 2 However, this part of the analysis is reasonably explained by NMFS: “

3 References to natural shorelines and beaches were intended only to reinforce and
 4 explain both the past and present effects of the tidegate structures as well as the
 5 additional effects 50 years into the future. The references to natural shorelines and
 6 beaches do not mean that the Service assumed pristine conditions would
 7 immediately occur in the absence of the Project or that they would occur
 8 immediately at the 50-year mark. In fact, the Service acknowledges that “where
 9 structures are left to degrade beyond their useful life . . . complete degradation
 10 could take years in some cases.” AR0051188.

11 Dkt. 59 at 8.

12 The Court finds that NMFS did not unreasonably base its jeopardy and adverse
 13 modification determination on the notion that the NNS Tidegate would be removed. “But for”
 14 the permitting of the NNS Tidegate Project, a structurally sound tidegate complex would not
 15 continue to exist.

16 District 12’s suggestion that NMFS should have attempted to predict the effects on the
 17 environment of a no longer functioning tidegate is also without merit. NMFS explained in detail
 18 why it is not feasible or helpful to speculate about the exponentially different scenarios if a
 19 structure is not repaired or replaced. AR0051187-89. Instead, NMFS based its effects analysis on
 20 the actual proposed project, including its clear purpose and consequence. See 84 Fed. Reg.
 21 44976, 44994 (Aug. 27, 2019). This was reasonable.

22 F. Best Available Science

23 “The ESA requires an agency to use ‘the best scientific and commercial data available’
 when formulating a BiOp.” *Locke*, 776 F.3d at 995 (quoting 16 U.S.C. § 1536(a)(2)); *see also* 50
 C.F.R. § 402.14(g)(8). “The purpose of the best available science standard is to prevent an
 agency from basing its action on speculation and surmise.” *Locke*, 776 F.3d at 995 (citing

1 *Bennett*, 520 U.S. at 176). “An agency complies with the best available science standard so long
2 as it does not ignore available studies, even if it disagrees with or discredits them.” *Id.*

3 “The determination of what constitutes the best scientific data available belongs to the
4 agency's special expertise and warrants substantial deference.” *Friends of Santa Clara River v.*
5 *U.S. Army Corps of Eng'rs*, 887 F.3d 906, 924 (9th Cir. 2018) (quoting *Jewell*, 747 F.3d at 602)
6 (simplified); *Forest Guardians v. U.S. Forest Serv.*, 641 F.3d 423, 442 (10th Cir. 2011) (it is not
7 the role of the court to weigh competing scientific analyses) (quoting *Ecology Ctr. v. Castaneda*,
8 574 F.3d 652, 659 (9th Cir. 2009)). Courts must be at their most deferential when considering
9 decisions requiring a high level of expertise (*Locke*, 776 F.3d at 995), but the court’s review
10 must be sufficiently probing to ensure that the agency’s decision is founded on a reasoned
11 evaluation of the relevant factors.” *Hausrath v. United States Dep’t of the Air Force*, 491 F.
12 Supp. 3d 770, 784 (D. Idaho 2020) (citations and quotation marks omitted).

13 District 12 argues NMFS failed to provide any quantitative or qualitative assessment of
14 the number of PS Chinook affected by the NNS Tidegate Project (compared to their overall
15 population) or explain how the PS Chinook effects impact the SRKW. Dkt. 40-1 at 21-22.

16 NMFS contends the type of assessment demanded by District 12 does not exist and, it is
17 not necessary to quantify impacts to listed species and critical habitat for those impact to “count”
18 as effects under the ESA. *See* 84 Fed. Reg. at 44,987 and 45,000:

19 Where appropriate, the Services use statistical and quantifiable methods . . . but
20 the best scientific and commercial data available often does not support this
21 degree of precision. As such, the Services are required to apply the statute and
22 regulations and reach a conclusion even where such data and methods are not
23 available.

22 In addition, long term data and trends relied on by NMFS contradict District 12’s claim
23 that NMFS is overstating the risk to PS Chinook. While District 12 points to short-term positive

1 trends to PS Chinook¹⁷, long-term data and trends relied on by NMFS show that their population
 2 and abundance fall well below recovery targets. Since 1990 population trends have not improved
 3 and even show a slight decline in the last 15 years. AR0051135. All long-term data indicate that
 4 PS Chinook salmon subpopulations continue to remain well below the recovery targets.
 5 AR0035562. The subpopulation of the PS Chinook is at less than 20 percent of their overall
 6 recovery goal and has also experienced a 15-year declining trends in abundance. AR0051210.
 7 Additionally, habitat quality remains poor and unable to support the species recovery.
 8 AR0051181-186; AR0051133; AR0051205-08. Using raw data from the figure in AR0051210
 9 between 1990 and 2019 yields negative trends for each of the six Skagit populations (ranging
 10 from -1 to -75%). The six Skagit stocks and the Skagit watershed are critical to population wide
 11 spatial structure and so population-level effects would cause an appreciable reduction of the PS
 12 Chinook unit to survive and recover, individually and collectively. AR0051225

13 NMFS reasonably relied on scientific evidence showing the PS Chinook and SRKW
 14 populations are small and at risk, PS Chinook stocks are of critical importance to the listed unit,
 15 and available habitat for PS Chinook is poor and cannot support conservation of this species.¹⁸
 16 The record also shows the prey component of critical habitat for SRKW is at a fraction of

17
 18 ¹⁷For example, Plaintiff relies heavily on the data in Table 50 at AR0035536 to assert positive
 19 population trends. NMFS argues the table does not provide adequate data from which to draw
 20 conclusions about population trends because they fail to capture important variability data. In
 contrast, NMFS points to long-term data which clearly indicates “either flat or negative trends
 for the entire ESU.” See AR0035535.

21 ¹⁸ District 12 also claims the majority of juvenile Chinook do not access habitat in Padilla Bay
 22 because they are blocked by the McGlinn Jetty. However, the record reflects that the majority of
 juvenile Chinook in Samish Bay, just to the North of Padilla Bay, are from populations outside
 23 of the Skagit Basin (AR0000530-31), and do not encounter the jetty. Also, while the jetty
 constrains passage for Skagit Chinook, it does not block them from using the Swinomish
 corridor (AR0040254) to access habitat in Padilla Bay (AR0037833-836).

1 historical levels and critical to protecting the species. The condition of the environmental
2 baseline is such that additional long-term negative effects on the quantity and quality of
3 nearshore and estuarine habitat for PS Chinook and prey availability for SRKW will therefore
4 impair its ability to support conservation of these species.

5 District 12 also argues NMFS erred in using an 1886 map to assume that the habitat
6 landward of the NNS Tidegate would return to marsh habitat. Dkt. 40-1 at 28. NMFS explains
7 the map accurately shows pre-tidegate habitat characteristics because the NNS Tidegate was
8 installed shortly before the 1886 surveys were conducted. AR0036306. The presence of
9 historical marsh habitat landward of the tidegate is also documented in other studies.
10 AR0036302; AR0036220. Also, although it is not likely dikes from the 1800s were of the same
11 height and composition of those installed today, even if the elevation were similar on both sides
12 of the dike, District 12's argument would suggest that mud flats existed landward of the dike
13 historically. However, the record reflects otherwise. *See, e.g.*, AR0050679 (map depicting
14 historic habitat of the NNS Tidegate area as "estuarine emergent wetland").

15 District 12 also claims NMFS failed to explain how 85 feet of existing armored shoreline
16 could return to functioning habitat and how this restored habitat affects the species. Dkt. 40-1 at
17 28-29. As explained in the NNS BiOp, NNS does not undertake a detailed evaluation of the
18 theoretical future degradation of existing structures because the range of potential outcomes is
19 exponential, to the point it is not reasonable to assume them all. To the extent consideration is
20 given to the future of a structure absent the proposed repair or replacement, those impacts are
21 part of the effects analysis – moved out in time to occur after the new useful life. AR0051188.

22 Nevertheless, historical conditions are informative of a future state absent manmade
23 stressors (AR0036311), and NMFS described the historic habitat in and around the NNS

1 Tidegate. AR0051181-86. The NNS BiOp included historic maps showing marsh vegetation
 2 existed landward of the tidegate and cited other sources indicating marsh habitat to be
 3 historically common in Padilla Bay. AR51182-83. NNS did not claim the NNS Tidegate
 4 impacted the vegetation in the entirety of Padilla Bay, only in front of the armoring. NMFS also
 5 provided a detailed analysis as to why the RPA will avoid jeopardy and adverse modification,
 6 AR51249-51, which is in essence an explanation of the significance of the habitat that would be
 7 restored absent the tidegate structures.¹⁹ *See, e.g.*, AR0051250.

8 District 12 also argues that NMFS inappropriately relied on generalized impacts when
 9 known tidegate impacts were available. Dkt. 40-1 at 29-30. District 12 argues that the NNS
 10 Tidegate Project would not cause deepening of the nearshore zone because the shoreline
 11 armoring exists today, and the area marineward of the tidegate is shallow mudflat. NNS explains
 12 that at high tide, the area immediately marineward of the shoreline armoring steeply deepens.
 13 AR0051186, AR0050547.

14 NMFS reasonably relied on current scientific data to conclude that the enduring effects of
 15 the NNS Tidegate Project over the next five decades, without meaningful habitat mitigation will
 16 “cause an appreciable reduction of the Puget Sound ESU to survive and recover because,
 17 individually and collectively, the six Skagit stocks are critical to ESU-wide life-history and
 18 genetic diversity. In all, 27 percent of the ESU’s populations reside in the Skagit system.”
 19 AR0051209; *see also* 50 C.F.R. § 402.02.

20
 21 ¹⁹ NMFS also notes that District 12’s skepticism about the significance of restored tidegate
 22 habitat is inconsistent with the TFI Agreement (which District 12 supported). AR0050776.
 23 Although District 12 attacks NMFS for relying on the TFI Agreement selectively, District 12
 cannot dispute that the underlying premise and purposes of the TFI Agreement remain relevant,
i.e., that “conversion [] of delta agricultural lands [w]as a means to achieve the estuarine habitat
 restoration and smolt production goals . . .”.

1 This is the type of scientific conclusion within NMFS’s “special expertise,” and the Court
 2 defers to its “determination of what constitutes the best scientific data available” and its
 3 “interpretation of that complex scientific data”. *Conservation Cong. v. Finley*, 774 F.3d 611, 620
 4 (9th Cir. 2014); *Nw. Ecosystem All. v. U.S. Fish & Wildlife Serv.*, 475 F.3d 1136, 1150 (9th Cir.
 5 2007); *Locke*, 776 F.3d at 995. NMFS did not unreasonably conclude that the NNS Tidegate
 6 Project will continue to add adverse effects to already low species’ population and poor habitat
 7 quality. Without habitat mitigation, the enduring effects will result in jeopardy and adverse
 8 modification.

9 G. RPA

10 NMFS developed the RPA to directly address the anticipated impacts from the NNS
 11 Tidegate Project on nearshore and estuarine habitat by requiring District 12 to (1) generate a
 12 minimum of 275 credits as measured by the Nearshore Calculator²⁰ (or equivalent) to address the
 13 NNS projects’ adverse effects to nearshore habitat (“nearshore RPA”) and (2) to restore a
 14 minimum of 8.6 acres of estuary habitat within the Skagit Bay/Padilla Bay area to account for
 15 the NNS Tidegate Project’s loss of estuary habitat (“estuary RPA”). AR0051236. NMFS’s RPA
 16 provides a range of ways for District 12 to reduce and offset the impacts of the NNS Tidegate
 17 Project on both nearshore and estuarine habitat to a level that avoids jeopardy and adverse
 18 modification for PS Chinook and SRKW. The RPA contains five options for implementation of
 19 the nearshore RPA and two options for the estuarine RPA, and the options may be used in any
 20 combination with each other to achieve the necessary offsets. AR0051237-42.

21
 22 ²⁰ NMFS explains that the nearshore calculator is a commonly used, publicly available user
 23 interface. 51-1 at 21, n. 11. An independent expert panel recently peer reviewed the nearshore
 calculator and determined it to be based on the best available science and generates reasonable
 and well-supported outputs. AR0051122.

1 Broadly speaking, “[RPAs] are the solutions to the problems inherent in a proposed
2 federal action which lead the consulting agency to find that the action will result in jeopardy. “If
3 jeopardy or adverse modification is found, the Secretary shall suggest those reasonable and
4 prudent alternatives which he believes would not violate subsection (a)(2) of this section and can
5 be taken by the Federal agency or applicant in implementing the agency action.” 16 U.S.C. §
6 1536(b)(3)(A). A valid RPA must be consistent with the purpose of the underlying action; be
7 consistent with the action agency's authority; be economically and technically feasible; and (4)
8 “avoid the likelihood” of jeopardy or adverse modification.

9 District 12 argues the RPA is arbitrary and capricious because it is irreconcilable with the
10 TFI BiOp; includes duplicative mitigation requirements; includes an improperly calculated Credit
11 RPA; and is not economically or technologically feasible.

12 1. Consistency With Prior Decisions

13 District 12 argues the RPA is irreconcilable with the TFI BiOp. Dkt. 39 at 25-26 (“There
14 is no rational basis for NMFS to conclude in 2019 that no mitigation was needed for this Project,
15 but to conclude that extensive mitigation is required for the very same Project in 2024.”) As
16 previously discussed, the TFI BiOp is not the legally correct benchmark for evaluating the
17 reasonableness of the RPA and it incorrectly interpreted the NNS Tidegate Project solely as an
18 operational improvement. The NNS BiOp is the independent consultation and operative decision
19 challenged here.

20 2. Mitigation Requirements

21 District 12 argues NMFS is requiring it to mitigate impacts of the NNS Tidegate Project
22 twice by requiring both the Nearshore RPA and the Estuary RPA. District 12 points to the TFI’s
23 use of credits, which mitigated *all* adverse impacts of a tidegate replacement. AR0000066. Thus,

1 District 12 concludes the Estuary RPA is solely sufficient to mitigate the impacts of the Project,
2 and the Nearshore RPA is redundant.

3 NMFS's jeopardy/adverse modification conclusion is based on impacts to both estuarine
4 and nearshore habitats and the estuary RPA does not mitigate or address the adverse effects of
5 the tidegate on nearshore habitat. In several other recent biological opinions with Puget Sound
6 nearshore impacts, NMFS concluded that a no-net loss approach was necessary and that
7 mitigation for nearshore impacts was therefore required to avoid jeopardy and adverse
8 modification. AR0002931; AR0002852; AR0026435; AR0000113. Scientific information
9 regarding the critical role of nearshore impacts, the need to offset those impacts, and the ability
10 to objectively calculate the impacts and required mitigation, has evolved considerably since the
11 TFI Agreement and TFI BiOp. NFMS contends it relied on best available science in concluding
12 that District 12 must offset the adverse impacts of the NNS Tidegate Project to both estuarine
13 and nearshore habitat to avoid jeopardy and adverse modification. *See, e.g.*, AR0003850;
14 AR0004195; AR0004524; AR0029132.

15 3. Calculation of the Credit RPA

16 District 12 also contends NMFS incorrectly multiplied the credits required by a factor of
17 1.9 because it incorrectly assumed the NNS Tidegate Project is in a pocket estuary. *See*
18 AR0039714; AR0038414 (identifying pocket estuaries in Skagit, Samish, and Padilla Bays).

19 NMFS explains that while pocket estuaries do not include embayments, both provide
20 similar features found to be important for Chinook rearing. AR0021528-29 (The proximity of a
21 pocket estuary/embayment to natal PS Chinook salmon streams has been linked with PS
22 Chinook salmon fry abundance (Beamer *et al.* 2005; Beamer *et al.* 2013; Beamer and Fresh
23 2012; Beamer *et al.* 2006)). The definition of the "Pocket Estuary or Embayment" adjustment

factor is comprehensive and used with the Nearshore Calculator. AR0014911. The Nearshore Calculator explains the term “pocket estuary” includes embayments (coastal inlets and barrier-type), estuaries, and lagoons. *See* AR0051122, n. 8 (*see* Ref tab, rows 81-84)²¹; *see also* AR0014911; AR0015057. The GIS map accompanying the Nearshore Calculator identifies the area adjacent to the NNS tide gate as “Pocket Estuary or Embayment.” AR0051122, n. 8, *see* Project D tab, row 22.

In identifying pocket estuaries and embayments features, NMFS developed and documented “a rapid assessment to identify areas that are likely to provide pocket estuary services (Appendix L).” AR0021528–29. The maps at issue (AR0039714; AR0038414), refer to pocket estuaries only and not to the broader definition of embayments, which the NMFS found to provide similar favorable features and rearing benefits as pocket estuaries. AR0021528–29. This was not unreasonable.

4. Economic and Technological Feasibility

District 12 also argues NMFS provides no analysis to support its conclusion of RPA feasibility. In terms of economic feasibility, the ESA requires only that an RPA “can be taken by the Federal agency or applicant.” 35 USC 1536(b)(3)(A). NMFS need only “consider whether its proposed alternative is financially and technologically possible,” and is “not responsible for balancing the life of the [endangered species] against the impact of [the RPA].” *Jewell*, 747 F.3d 581. NMFS is also not required to “pick the best option for the industry” but must provide some analysis of the options it selects. *Greenpeace v. Nat'l Marine Fisheries Serv.*, 55 F.Supp.2d 1248, 1268–69 (W.D.Wash.1999).

²¹ The weblink in footnote 8 has been updated to <https://www.fisheries.noaa.gov/resource/tool-app/puget-sound-nearshore-conservation-calculator>.

1 In its comments on the draft BiOp, District 12 asserted it can only use its small
2 “drainage” funds (\$100,000 per annum) for the NNS Project, rather than other larger portions of
3 its budget (Dkt. 41-1 at 34; AR0002888; AR0051333) but provides no economic evidence of this
4 or explain why it is so limited when its drainage and diking assessment areas both include the
5 NNS Tidegate Project (AR0051248) and diking is inherent in the project.

6 District 12 argues NMFS should have given it every opportunity to assist in developing
7 the RPA but instead, NMFS relied on what is essentially on a “Google search.” District 12 was
8 given an opportunity to comment on the draft RPA but failed to provide any financial evidence
9 of economic infeasibility. Lacking such financial information, NMFS relied on publicly available
10 records of the Skagit County Assessor and other public entities reflecting the financial status of
11 District 12, including an audit reflecting over \$19 million in cash and investments; District 12’s
12 ability to collect levies/assessments (RCW 85.18.010; RCW 85.06); publicly owned land
13 adjacent to NNS; and District 12’s land with restoration potential (to reduce the cost of
14 restoration projects) (market value estimated at \$7,000 per acre by the County Assessor such that
15 8.6 acres would cost about \$60,000).²² AR0051248

16 District 12 claims NMFS “disregarded contrary evidence provided by District 12” but
17 fails to explain the nature of that evidence. Dkt. 52 at 30. District 12 also objects to NMFS’s
18 assumption regarding its ability to levy, noting that the total assessed value of the drainage area
19 was approximately \$6.3 million at the end of 2024, whereas it estimates the cost of the RPA at
20 nearly \$2.5 million. Dkt. 52 at 31.

21
22 ²² NMFS also outlined the benefits of restoration sponsors or partnerships (*i.e.*, the Fisher Slough
23 restoration project where the Nature Conservancy of Washington collaborated with partners such
as Dike District 3 and Drainage and Irrigation District 17 to restore a 60-acre site. AR0051247.

1 NMFS's reliance on public records for evidence of economic feasibility was not
2 unreasonable and under the circumstances described, NMFS has met its obligation to consider
3 whether the RPAs proposed are financially possible.

4 CONCLUSION

5 The Court concludes the NNS BiOp is reasonable, supported by the record, and is
6 financially feasible. Thus, the Court **denies** District 12's motion for summary judgment (Dkt.40-
7 1) and **grants** NMFS's motion for summary judgment (Dkt. 51).

8
9 DATED this 28th day of April, 2025.

10
11 

12 BRIAN A. TSUCHIDA
13 United States Magistrate Judge
14
15
16
17
18
19
20
21
22
23